Natural & Working Lands Working Group November 1, 2019 Meeting Notes

The Working Group was welcomed by co-chairs Amanda Beal and Tom Abello.

Facilitator Jo D Saffeir discussed the ground rules and meeting schedule. The May 1, 2020, meeting may require a full day for finalizing recommendations to the Maine Climate Council.

Sarah Curran described the structure and responsibilities of the Maine Climate Council, the Science & Technical Committee and the 6 Working Groups.

Tom Abello noted that the Working Group is subject to State Freedom of Access Act requirements; documents should be shared publicly and substantive discussions among Working Group members should take place in public meetings.

Working Group members introduced themselves and briefly discussed their experience and hopes for the Working Group process:
– find collaborative strategies; honor private landowner conservation efforts
– maintain resilient habitat and systems
– find opportunities to mitigate impacts to wildlife and habitat; support working lands
– have a consistent policy message; see loggers as part of the solution; recognize existing investments by loggers
– look at the role of small woodlot owners in managing forests for carbon sequestration
– how will the goal of carbon neutrality by 2045 be addressed?
– research on natural climate solutions for farmers
– keep forests in the landscape; improve forest conditions; look for forest ownership by farmers
– connect with small farms to help them solve climate issues
– provide incentives, education, and support for ag producers; recognize regenerative agriculture practices; support transition to more sustainable practices to maintain farm viability
– support young farmers; incorporate sustainable practices in daily living; provide clear and consistent messaging on soil health; look at energy costs for farms
– consider the circular economy of forestry; connect climate issues and solutions to markets
– forest products can be a climate solution while helping people and the economy; protect forests from fire and invasives; we need good metrics on carbon and forests; what progress have we measured from prior state climate action plans?
– Maine can be a model for open conversations on climate issues; how can we best communicate what we are doing and convey messages to and from all the various interested parties?
– environmental changes from climate have impact on wildlife habitat; recognize the importance of natural lands; look at strategically promoting renewable energy sources while avoiding adverse impacts
– support locally led, voluntary conservation practices; tap into USDA-NRCS for data on existing agricultural and forestry conservation practices; Soil & Water Conservation Districts can assist with outreach and technical assistance to landowners
– create a sense of trust among all parties; define common priorities; find common-sense practical solutions; recommendations should be readily enacted and provide substantive impact; recognize the diversity of private landowners; carbon is complex to measure
– we need actionable ideas for DACF and others to implement
– we need clear, practical solutions; Governor Mills is very supportive of a balanced approach to climate issues; we will take action from the information we have available; the Maine Climate Council will have to sort through and prioritize the many recommendations from the various Working Groups

Tom Abello presented the draft Scope of Work for the Working Group's discussion:

<u>Mitigation</u>
– how to define "mitigation"? carbon mitigation only? Is wildlife "mitigation" really wildlife "adaptation"?
– need to discuss the dichotomy of "mitigation" and "adaptation"

– we must mitigate the adverse carbon impacts of working lands; adaptation isn't enough
– beware of unintended consequences of actions; look at economic impacts of proposed solutions
– "adaptation" sounds reactive; we need to think proactively to mitigate impacts
– building system resilience is part of adaptation; climate change will reorganize our economy whether we like it or not; we need to act and make sure our constituencies adapt to a variety of changes
– increased resilience can have positive economic impacts, which we need to identify and communicate
– Northern New England may be the one US region with gross domestic product not adversely by climate change
– which sectors should get credit for carbon capture (eg, forestry for producing wood building products or the urban and building sector for constructing more wooden buildings)?
– this may not matter as long as our carbon accounting recognizes the involvement of multiple sectors
– the details of carbon accounting are complex and not easily sorted out
– the bottom line is that we cannot lose forest or farm land
– how do we address development of high-value solar energy projects on productive farmland or moderate-value hayland?
– the Working Group needs to identify the impacts of its recommendations; don't start with accounting – end with it
– this is a good process suggestion; carbon accounting is tough; don't push impacts from one land base to another
– the scope of work doesn't identify the existing contributions of natural and working lands; we need to recognize what we have accomplished on carbon mitigation to date
– we need baseline data on greenhouse gas sources; how much carbon do natural and working lands sequester?
– DEP and IF&W may track some of this and could provide data at a future meeting

Adaptation
– adaptation isn't just a negative reaction to change; adaptation can provide positive benefits
– recognize that adaptation produces challenges and opportunities that must be managed thoughtfully
– resiliency should be mentioned as a positive adaptation for all sectors
– resiliency and adaptation will be necessary to maintain our quality of life
– Maine has accomplished a lot in wildlife management to increase resiliency – need to recognize what we have done
– how can we better support existing programs that are having good results?
– we need to emphasize opportunities in our messaging – bad news doesn't sell well to the Legislature or the public
– encourage building wooden structures to sequester carbon, strengthen forest product demand, and keep the forest economy strong; replace plastics with biogenic products
– agriculture also needs to adapt and build resiliency; need to build a local food economy and avoid the costs of transporting food in from out-of-state
– we need to focus on our own state's land use and energy practices first, while recognizing we are part of a planetary ecosystem
– wood is replacing petroleum in many ways – will we embrace this change? Adaptation is tied to economy – loggers working less due to climate impacts, they want to adapt to keep working, and want to build forest resiliency

Cross-over Topics
– how will we coordinate crossover issues with other Working Groups?
– Climate Council Steering Committee will coordinate crossover issues as they emerge
– how will the Climate Council deal with contradictory recommendations from Working Groups?
– we'll see; we expect healthy discussion of issues at the Climate Council meetings
– Maine farms are interested in solar power – this is a cross-over topic among several Working Groups
– energy production, site location, and transmission affect natural and working lands
– will we look at marine closures?
– this will be the purview of the Coastal Working Group
– each Working Group is asking similar questions about cross-over issues
– Governor's Office of Policy Innovation & the Future staff will be weaving threads from various Working Groups

– climate is impacting road access to farm fields and forests; regional and national energy costs are important issues
– interested in the topic of blue carbon and cross-over with the Coastal working Group
– is there a Working Group devoted to water? Land management impacts water management
– Maine does not have well-defined water policy; irrigation is becoming more prevalent and affects water management
– how to address recreational use of land? ATV impacts? Snowmobile use?
– recreation can be addressed by the N&WL Working Group
– access to power is important; power losses affect agriculture and forest operations

Draft Work Plan

Jo D. Saffeir and Amanda Beal presented the draft work plan for discussion:
– the Working Group may need expert help with cost/benefit analysis in April
– the Governor's 2045 carbon neutrality goal is not listed but must be considered
– we must be specific and tangible in our recommendations
– there should be opportunity to discuss strategies immediately after baseline presentations are made, rather than only discussing strategies later in the process
– create a repository of individual recommendations on the Working Group's Share Drive
– mitigation strategies should be clear, but adaptation is hard to quantify and to be proactive about future impacts and results
– we can be specific about some adaptation strategies
– farmers tend not to show off their adaptation experiments; we need to look at data on fuel savings and carbon impacts of cover crops
– we need to focus on discussions, not just listening to presentations
– should we organize by industry sectors (agriculture, forestry, natural areas)?
– what expertise are we missing? What does the Working Group want to hear about?
– need to look at past climate plans and how we've done
– we have a good grasp on climate projections; What is Maine's greenhouse gas emissions profile? What must natural and working lands contribute to carbon reduction? What's in place for promoting adaptation practices? Some of these State plans and reports are mind-numbing
– how much agricultural and forest production do we have? Can we see maps? What can we share between meetings?
– be mindful of public access issues; make Working Groups documents and resources available to all
– look at other states as models; how do we measure carbon sequestration? Are there third-party certification systems for good land management practices in other states?
– 35 states are currently inventing this wheel – learn from others
– how to fund the working Group recommendations?
– this will be an issue for the Working Group to address in its deliberations
– it would be interesting to compare Maine emissions with other New England states
– share the Maine Climate Action Report
– DEP will have updated Climate Action Plan information for the December meeting
– stocking levels for forests is a big issue we need to think about

Science & Technical Committee

S&TC co-chair Ivan Fernandez asked what information needs the S&TC could address for the Working Group:
– questions tend toward impacts; we need to better define mitigation opportunities
– I don't know what I don't know
– S&TC should be advisory and sort out conflicts on how we should measure carbon
– we need an on-line gallery of webinars, briefings, and presentations for future reference
– we need economic analysis of proposed solutions
– there are 2 economists on the ST&C; more help may be needed
– every Working Group will be dealing with cost/benefit analysis; we are looking for consultants
– who will analyze our metrics?

– we need to figure out how to document our accomplishments over time
– how much carbon reduction is expected from natural and working lands?
– this is to be determined

Public Comments:
– talk about how to measure stocking levels and what are stocking levels; Mark Berry has data; think beyond emissions and look at opportunities for carbon sequestration; don't be in silos
– University of Maine project funded in part by the US Climate Alliance, the Mitchell Center, ME Farmland Trust, and others will be looking at modeling farm and forestry practices for carbon sequestration; ongoing University research feeds into many of the Working Group's questions; they will try to contribute within the Working Group's timeframe
– Brunswick resident willing to share his climate experiences in Maryland; need to trade among sectors; learn from other states

Next Meeting:
– be more intentional in addresses low income and elderly issues and benefits
– more detailed discussion topics and materials
– provide materials as early as possible for review
-- sector-specific materials should be shared or presented
– short presentations are helpful
– January ST&C will have some preliminary findings to share
– save the date for the January 29th Maine Climate Council meeting
– GOPIF website and climate pages will be live very soon
– discussion strategies after presentations; February meeting on strategies may need to be a full day
– requested to be added to e-mail list for this Working Group
– Climate Council will maintain one email subscriber list for all Working Groups

DRAFT FROM FOREST SOCIETY OF MAINE

MAINE FOREST CARBON STORAGE PROGRAM

12/3/2019

Purpose: To increase carbon storage on Maine forestland and reduce atmospheric greenhouse gas concentrations over time through a voluntary program that would maintain harvests at least at current volumes

Voluntary Program: Forest landowners in Maine are eligible to voluntarily agree to a carbon storage program with the following characteristics:

- Written contract that "runs with the land"; filed with registry of deeds
- Landowner agrees to increase stocking levels on forestland over the 30 year period and to maintain initial stocking level for 100 years; the landowner determines how to accomplish goals
- Landowner selects the target stocking level to be achieved in the 30 year period and provides a recent forest inventory reflecting current stocking levels
- Landowner agrees to maintain harvesting activity that has taken place on the property at least at the same level as in the past several decades
- Landowner receives an initial payment for agreement to maintain existing stocking level on property for 100 years
- The landowner receives payments in years 10, 20, and 30 based on demonstrated performance toward increased stocking level goal through a basic forest inventory
- If landowner violates the terms of the agreement, landowner must return any payments to program (provisions would be included to recognize natural disasters, disease outbreaks, or beyond the landowner's control)
- Payments to landowners are sufficient to help defray the costs of managing to increase stocking levels, maintain starting stocking levels, and to maintain harvest activity

Maine Program: The Carbon Storage Program is a Maine initiative. It is funded in part by the periodic open sale of the amounts of CO_2 stored in Maine's forests through this program for anyone who wishes to purchase them including but not limited to businesses that require transportation or other contributors of greenhouse gases; companies that wish to enhance their profile with consumers, or others. There are likely other sources of revenue that could provide funding for this program.

Notes:

- The 30 year timeframe is selected to be relevant to mid-century atmospheric greenhouse gas reduction goals
- 1 cord of wood is estimated to represent approximately 2 metric tons CO_2e
- Maine Forest Service estimated that the average cord of wood in Maine is worth $40-$50
- The provision for continued harvests at approximately current levels is designed to insure atmospheric greenhouse gas reductions are real Is by addressing "leakage" and to support a continued supply of wood products that are integral to Maine's economy

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Reviewed by: Dr. Ivan Fernandez; Forester Alec Giffen

Preliminary Suggestions from New England Forestry Foundation on Forestry for Consideration by the Maine Climate Council

The following initiatives to capitalize the role forests could play to mitigate climate change are suggested by the New England Forestry Foundation based on work done over the last several years. They are offered as a draft to be refined. We can provide more information on each of these topics and stand ready to help the council in any way we can.

I. Increase carbon stored in the forest while maintaining harvest.

Initiatives that could contribute to achieving this goal include:

A. **Sell State general obligation bonds (likely tax exempt) to buy and restock depleted forest land.** While not proposed as a revenue bond, revenue streams to repay the cost of the bonds could include:

1) Carbon sales
   - Voluntary markets
   - Compliance markets
   - Offsets
2) Sales of Exemplary Forestry conservation easements on lands acquired
3) Sale of timber, initially low volumes from improvement cuts and eventually above average harvests of better quality trees after restocking
4) Sale of land after it has been restocked (alternatively the land could be retained for timber revenues and public use)

B. Provide State of Maine **financial incentives (taxes, direct payments, etc.) for landowners who commit to increase timber stocking while maintaining harvesting**

C. Provide State of Maine **financial incentives for landowners who commit to practicing Exemplary Forestry** (see https://newenglandforestry.org/ for information on what Exemplary Forestry is). This would accomplish the same purpose as above and add benefits for biodiversity and wildlife

D. **Regulatory incentives** to restock the lands and improve wildlife habitat (e.g., approval of Outcome Based Forestry proposals that include such measures)

E. Advocate for an **expansion of federal funding** to restock the lands and improve wildlife habitat

F. **Create and implement the Exemplary Forest Investment Fund** which combines philanthropic with investment funding to purchase and manage forest land for the long term to Exemplary Forestry standards (see https://mainemountaincollaborative.org/ for information on the Exemplary Forestry Investment Fund)

G. Provide State, and advocate for federal, **incentives for manufacturers who shift to using small diameter trees from overstocked stands**

H. Provide **incentives for small private landowners to sustainably harvest their lands** and improve wildlife habitat (Note: By including wildlife habitat objectives, this is more complex than I.B. above)

I. **Develop the programs outlined above with other states,** e.g., to meet its 80 by 50 goals, would Massachusetts consider a bond issue to buy and restore depleted forest land throughout New England, and/or could the Regional Greenhouse Gas Initiative fund any of the above?

J. **Promote the opportunity for private purchase and restocking of depleted Maine lands as offsets** for emissions of oil and gas companies, airlines, ride services (e.g., Uber)

II. Reduce emissions and store carbon by building with wood. Initiatives that could contribute to achieving this goal include:

A. **Develop State purchasing policies that:**

1) **Require wood construction designs** be considered for state construction projects

2) **Favor wood construction** when it is possible

B. Provide State of Maine **financial incentives (taxes, etc.) for building with wood by municipalities, corporations, and individuals**

C. **Advocate for federal policies** that favor wood construction

D. **State support** (funding through FAME and/or tax incentives) **for developing and manufacturing new wood products** that substitute for more energy intensive alternatives (e.g., wood-based insulation, cross laminated timber, etc.

E. Advocate for federal policies that support developing new wood products

III. Improve our understanding of how forests can mitigate climate change. Specific initiatives that could contribute to achieving this goal include:

A. Advocate for **research on how we can increase the influence of forests in mitigating climate change** from both the perspective of:

1) Individual influences, e.g., changing albedo or the production of biogenic volatile organic compounds

2) Synergistic effects of several influences combined

IV. Integrated program – Establish a comprehensive, internally consistent, and self-funded forestry and agriculture program

1) Establish forestry and ag standards that yield incremental and verifiable climate benefits

- Forestry – Exemplary forest standards
- Ag – not sure what standards should apply

2) Create government or government affiliated organization that aggregates, evaluates, and monitors forestry and ag commitments
3) Aggregate and either sell carbon credits into existing market or work with other NE states to establish forest and ag carbon market
4) Use carbon revenue to create incentives for landowner conservation agreements. This could be
    - Create new (lower) property tax category for enrolled land. Municipalities reimbursed from carbon revenue
    - Create refundable tax credit
    - Create landowner payment scheme
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